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Annex "A," Subparagraph 3e,
Economic Background

TRANSPORTATION AND DOMESTIC TRADE

489 The transportation facilities of East China, especially because of the region's dominant position in ocean shipping, are farther advanced than those in other regions of the country. Except in Fukien, railway transportation plays a very important role among the East China provinces; in the development of highways, special attention had been paid to the construction of a highway network in the coastal areas and linking it with the principal national highways of other regions. As for aviation, it has not been significant in local transportation because East China lacks up-to-date commercial planes. In connection with domestic trade, East China has been a major source of supply of daily necessities to the entire country. Most of China's textile and light-manufacturing factories are located in Shanghai and Tsingtao in this region.

I. RAILWAY REHABILITATION AND CONSTRUCTION

496 After World War II, the Chinese Nationalist Government exerted great effort to

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Table 1.
The Railway Lines of East China-1949*
(unit: km.-kilometers
mi.-miles)

Railway Lines	Main Terminals	Length

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The Tsinan Railway Administration

A. Trunk Lines		
1. Tientsin--P'u-k'ou	Techou--Pangpu	779 km. (487 mi.)
2. Lunghai	Lienyün--Shangch'iu	1,740 km. (1,088 mi.)
3. Tsinan--Tsingtao	Tsinan--Tsingtao	396 km. (247 mi.)
4. Pangpu--Suichiahu	Pangpu--Suichiahu	61 km. (38 mi.)
5. Hainan	T'ienchiaan--Yühsik'ou	214 km. (134 mi.)
B. Branch Lines		
1. Chinlingchen-T'iehshan	Chinlingchen--T'iehshan	7 km. (4 mi.)
2. Changchou--Tsupo	Changchou--Tsupo	40 km. (25 mi.)
3. Ts'uyao--Hsint'ai	Ts'uyao--Hsint'ai	66 km. (41 mi.)
4. Liuch'üan--Chiawang	Liuch'üan--Chiawang	16 km. (10 mi.)
5. Shuichiahu--Patashan	Shuichiahu--Patashan	43 km. (27 mi.)
6. Hsüehih'eng--Tsaochuang	Hsüehch'eng--Tsaochuang	31 km. (19 mi.)
Total		3,392 km. (2,120 mi.)

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The Shanghai Railway Administration

A. Trunk Lines		
1. Shanghai—Nanking	Shanghai—Nanking	312 km. (195 mi.)
2. Shanghai—Ningpo	Shanghai—Hangchow—Ningpo	187 km. (117 mi.)
3. Nanking—Wuhu	Nanling—Wuhu	107 km. (67 mi.)
4. Tientsin—P'uk'ou	Pangpu—P'uk'ou	779 km. (487 mi.)
5. Chekiang—Kiangsi	Hangchow—Yingt'an	949 km. (593 mi.)
B. Branch Lines		
1. Paoshanlu—Yüntsaopin	Paoshanlu—Yüntsaopin	15 km. (9 mi.)
2. Chinhua—Lanch'i	Chinhua—Lanch'i	23 km. (14 mi.)
	Total	2,372 km. (1,482 mi.)
	Grand Total	5,764 km. (3,602 mi.)

[Face p. 840c]

*Ito-Toshio, Chukyo Tetsudo No Genjo /The Present Conditions of the Chinese Communist Railways/, Tokyo, Gaimusho /Ministry of Foreign Affairs/, 1954, pp. 42-53; Ling Hung-hsün, Chung-kuo T'ieh-lu Kai-lan /General Survey of the Chinese Railways/, Taipei, 1950, pp. 27-34.

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496 restore railways in East China and North China because these regions are political as well as commercial centers of the country. But since coming to power in 1949 the Communists have paid little attention to the expansion of railway facilities in East China. Those railways which are in operation are in poor condition.

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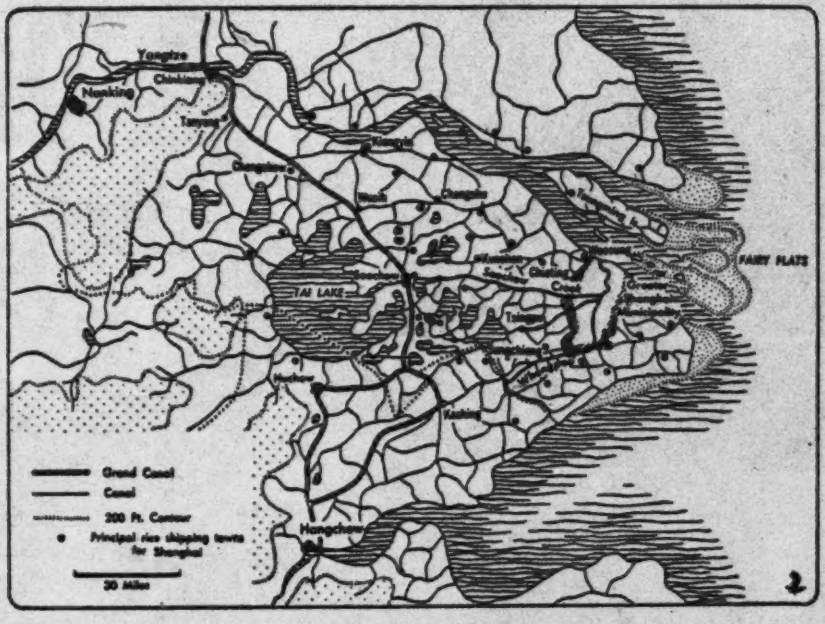
village or town entirely by water, and in most cases in no other way. According to existing estimates,[8] and on the basis of the incomplete cartographic data, the delta area must contain at least half a million miles of canalized or artificial waterways. The railway between Shanghai and Nanking includes in its 193 miles 164 bridges over navigable rivers or canals.



Map 5. Waterways of the Yangtze Delta. All waterways shown are navigable. Provincial boundaries are indicated by a dotted line.

The use of water routes is reflected in the sparseness of roads compared with other level areas of China and in the fact that such roads as exist run in most cases at right angles to major waterways. In addition, carts and barrows are scarce in the Yangtze delta, in marked contrast with other areas of China, or with most pre-industrial regions. Traditional Chinese bridges in the delta area are nearly all of the single span hump-backed type, reflecting the virtual absence of wheeled traffic as well as the need to provide adequate clearance over waterways for the passage of masted vessels.

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505 438 496 The opening of the Yangtze to steam navigation by about 1862 following the Treaty of Tientsin (in 1858 between China and Great Britain; the commercial section of the treaty was not completed until 1860) ensured the ascendancy of Shanghai over rival southern ports by allowing the trade of central China to drain by its natural route, and within a very few years reduced to a trickle the formerly large volume of trade overland from points outside the Hsi system to Canton, via the Cheling and Meiling passes. The beginnings of highway and railway development in China (map 8) have added to the trade carried by the Yangtze system, by acting as feeders, just as any increase in the economic activity of central China will be reflected in more intensive use of its major trade artery. The Hankow-Canton railway, completed through the Cheling pass in 1936, has tended to augment the volume of goods carried by the Yangtze toward and from Shanghai, and the same has been true of the older railway built in 1910 by the French from Kunming in Yünnan, near the upper navigable reaches of the Yangtze, to the seaport of Hanoi in French Indo-China. With a complete and well-organized rail network, transport use of the Yangtze may eventually decline in relative, though not in absolute importance. At least as far upstream as Hankow, railway development may never supplant it as the major carrier in the lower river basin.*

496 Complemetary to the natural focus of water routes, and concomitant with the growth of the city, two of China's major railways (Shanghai-Nanking, with connections north to Tsinan, Tientsin, and Peking, and west to Chenghsien and Sian; and Shanghai-Hangchow-Ningpo, with connections west to Nanchang and Hankow and south to Canton) terminate at Shanghai (map 8), and a small network of motor roads links the city with most of the other centers of the lower Yangtze basin. The gathering of rail and highway routes at Shanghai is however a reflection of rather than a

* The importance of the Yangtze as a carrier in future competition with well developed railways may perhaps be compared with the current importance of the lower Rhine, below Mannheim. Although it runs through the heart of a major industrial region with one of the densest and most heavily traveled rail nets in the world (including lines along both banks of the river), the Rhine and its tributaries consistently carry a larger volume of goods than the combined railway lines through its basin.

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factor in the pre-eminent location of the city. Peking, Tientsin, and Chenghsien are all more important rail centers than Shanghai. 496

Sea Routes

Shanghai's orientation to the sea is almost equally favorable. It lies less than a hundred miles east of the great circle route followed by shipping between west coast North America, and Japan, China and southeast Asia. All of the major commerce lanes of the western Pacific meet there. Midway on the China coast between north and south, Shanghai has the further double advantage of accessibility from the Chinese hinterland and nearness to Japan and the trans-Pacific trade. The China coast at the Yangtze delta extends farther eastward into the open sea than at any other point. The Yangtze keeps Shanghai in close relation to the hinterland despite its seaward extension, which in turn gives it an advantage over ports south of the coastal bulge, or north China ports on the enclosed Gulf of Pohai. 487

For the coasting trade it is a natural terminus. A foreign observer noted in 1843[4] that it was the division point between the carrying trade of junks from northern and southern ports, and that it acted as the leading entrepot on the China coast for the concentration and exchange of goods from the two major regions of China. This function Shanghai has retained to the present at least for the coasting trade carried in native junks, which is considerable though largely unmeasured. All direct coastal routes between northern and southern ports must touch the Yangtze estuary.

Shanghai is approximately equidistant in shipping time and distance from western European and eastern United States ports. Shippers must compete there on equal terms, and goods arriving via Suez or Panama can be laid down at competitive prices. Shanghai is not the terminus of either route (Singapore serving this function for west-bound traffic and Nagasaki for east-bound), although it is a major port of call for both. But most important is its focal position for Far Eastern shipping, and its median location between Atlantic Europe and America.

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SEVEN

Transport Routes and Trade in the Hinterland

496 The commercial ascendancy of Shanghai was due in large measure to its favorable orientation to the major sources of China's leading trade goods. This specific locational advantage will now be examined in a more detailed analysis of the production and transport of the staple articles of trade. In the interests of clarity, the main transport routes leading to the city will be treated first so that the discussion of production and movement of goods which follows it may be read in the light of the environmental conditions which directed their flow.

Transport Routes

The first railway connection with Shanghai was the Nanking line (193 miles or 308 kilometers), which was opened to traffic in 1908. It was followed in 1909 by the line to Hangchow (118 miles or 188 kilometers), and these two have remained the only rail connections aside from the spur to Woosung. By 1936, the total length of railways tributary to Shanghai was about 600 miles, as against 1900 497 for Peking and 1300 for Tientsin (map 8). From 1930 to 1936, the Hangchow and Nanking lines each carried annually about one million tons per mile of line, or about the average for a moderately important branch line in the United States. The same figure for the main line of the Pennsylvania Railroad during this period was about 38 million tons.[1]

Despite the fact that Shanghai is by far the largest and most completely industrialized city in China, the total haulage of the two railway lines connected with it averaged between 1930 and 1936 only 7 per cent of the total kilometer/tons hauled by Chinese

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497 railways (exclusive of Manchuria).* The role of railways in the growth of Shanghai has clearly been minor, and they have never become large volume carriers on a Western scale, despite their connections with most of the several large cities in the delta, and despite the relatively great agricultural and industrial productivity of the lower Yangtze basin.

491 The highway pattern is also relatively little developed. Two roads run south from Shanghai to Hangchow (both opened to traffic in 1932), and one runs north to Nanking. A large proportion of the highway mileage runs beside the railway lines, which makes the highways less useful than if they ran independently of or as feeders for the railways. The northern and southern highway routes are joined by a road from Kashing to Soochow, but the few remaining roads are either short-distance feeders or dead ends. There is no direct road connection between the major cities of Soochow and Wusih or Nanking. With minor exceptions in the vicinity of Shanghai, none of these surfaces were paved, and nearly all of the mileage is two-lane only.

494 The paucity of roads is presumably not due either to construction difficulties or to lack of general trade volume, although level ground in this area is usually accompanied by a dense network of natural and artificial waterways over which bridges must be built. The roads were constructed primarily for tourists and for general automobile travel rather than for commercial haulage. At least two of the major links (the shore road from Hangchow to Shanghai and the northern road from Shanghai to Soochow) were legally closed to vehicles over three tons gross weight from the time of their construction.[3] Due partly to the high cost of fuel, trucks, and parts, and partly to the generally pre-industrial nature of the economy, the volume of truck haulage on all of these roads has remained slight.[4]

505 Within the delta, however, and within most of the Yangtze basin, goods can move so easily and cheaply by water that there is little

496 *The total length of railways in China proper in 1936 was 9,712 kilometers, of which the two lines discussed above accounted for 753 kilometers (including sidings, loops, branches, and 112 kilometers of second track in and on the outskirts of Shanghai, Nanking, and Hangchow), or 8.3 per cent.[2]

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need for mechanized carriers even to supply a city the size of Shanghai. The Shanghai Municipal Council made a traffic count in 1919 on Soochow Creek near its mouth and found a 24-hour average of 1858 cargo boats between 10 and 90 tons cargo capacity

Map 8. Railways of China, as of 1936 (reproduced here by the courtesy of *The Geographical Review*).

and 807 freight sampans passing the point of count.[8] Assuming that half of these boats were empty and half were loaded to capacity, and assuming arbitrarily that the sampans had half of the average cargo capacity of the cargo boats, these figures show a volume of

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done with dispatch soon after Shanghai had been taken. By the end of 1949, railways destroyed in the delta area during the civil war had been restored to operation, and by the end of 1950, most of the lines in China as of 1936 had been rebuilt, plus considerable new mileage. Great stress has also been put on maintaining a high level of commodity flow by water transport from the Yangtze and the delta to Shanghai. Numerous hydraulic improvements were undertaken in 1949, 1950, and 1951, including the widening, deepening, and regulating of existing waterways, the building of additional carriers of all types,* and in November 1950 the commencement of a very large five-year project for the regulation of the Huai River, designed primarily to prevent its disastrous floods, but also to facilitate navigation.[2]

But the sea routes, equally vital to the city's economic life, remain largely closed. Political capital has been made of this unfortunate situation, since it has in effect called the Communists' bluff in their repeated assertions that Shanghai was a foreign sore on the Chinese body politic and should be integrated with China rather than with its kindred economies overseas.

> The new Shanghai . . . is closely linked by commerce and the interflow of goods with the rest of the country. Facing inland instead of across the sea, it is integrated politically, economically, and culturally with the nation whose needs it serves. From being a source of infection in China's economic life, Shanghai has today become a source of strength to the new China.[3]

This is cold comfort. Shanghai can be a source of strength to China only if it produces, and it cannot reach more than a part of its industrial potential while the sea routes which feed it are closed. The shortage of coal in the city remains, if one may read between the lines of official statements and news releases. Electric power is rationed; new users are discouraged, and one gathers that current users are unable to get enough to increase their production. Remembering the crucial importance of cheap and abundant electric power for all of the city's industry, as we have discussed it above

* 192 inland water craft were built in Shanghai alone in 1950, totalling 28,000 tons displacement, according to Ching-Chi Chou-Pao for January 4, 1951, p. 9.